## IL NUOVO CIMENTO

INDICI
DEL VOLUME XXII - SERIE X
1961



# INDICE SISTEMATICO PER NUMERI SUCCESSIVI DEL PERIODICO

#### N. 1 - 1° Ottobre 1961

Y. EISENBERG, M. FRIEDMANN, G. ALEXANDER and D. KESSLER - On the		
multi-nucleon capture of K <sup>-</sup> -mesons	pag.	1
S. Shinohara - Donor states and deformation around impurity atoms in		
semiconductors	>>	18
M. GIANNINI, D. PROSPERI and S. SCIUTI - Spins and parities of excited		
levels in <sup>212</sup> Po	>>	31
P. Surányi - On the experimental evidence for pion-pion interaction in		
high-energy $\pi$ - $\mathcal{N}$ and $\mathcal{N}$ - $\mathcal{N}$ events	>>	40
PH. SALIN - K-meson form factor in the bipion approximation	>>	51
M. Schiff - Transfer of negative muons to gases dissolved in a hydrogen		
bubble chamber	)>	66
J. G. TAYLOR - Analyticity and crossing for partial waves	>>	92
C. LOVELACE - On the existence of solutions of the pion-pion dispersion		
equations - II	))	102
C. MILONE and R. RICAMO - Differential cross-section for the D(d, n) reaction	*	116
G. DA PRATO - Single pion production in proton-proton collisions according		
to the one-particle exchange model	>>	123
V. EMMA, C. MILONE, A. RUBBINO, S. JANNELLI and F. MEZZANARES – Energy		
spectrum of photoneutrons from cobalt	>>	135
Y. P. Varshni - Comparison of three equations for the spacing of nuclear		
levels	>>	145
N. B. Gove and R. Nakasima - On reaction cross-sections with 14 MeV		
neutrons	>>	158
M. N. Hack - Interference effects of radiofrequency fields in resonance		
radiation	>>	168
L. M. Brown – Analytic properties of $n$ -point loops in perturbation theory	)>	178
W. K. R. Watson – High-energy nucleon-nucleon collisions	>>	183
0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		
Lettere alla Redazione:		
Lettere and Reductions.		
V. S. VRKLJAN - Über die Berechnung der Schallgeschwindigkeit in Gas-		
mischungen - II. Mitteilung	>>	189
M. Froissart – Elimination of the inelastic cut in the $N/D$ method	>>	191
F. GRARD, G. MACLEOD, L. MONTANET, M. CRESTI, R. BARLOUTAUD, C. CHO-		
QUET, JM. GAILLARD, J. HEUGHEBAERT, A. LEVEQUE, P. LEHMANN,		
J. MEYER and D. REVEL – $\pi$ -proton scattering at 516, 616, 710, 887,		
and 1085 MeV	>>	193

G. Charpak, F. J. M. Farley, R. L. Garwin, T. Muller, J. C. Sens, V. L. Telegdi, C. M. York and A. Zichichi – Quenching of muon		
depolarization by weak magnetic fields	pag.	199 203
K. IGI and H. SHIMOIDA - Kaon-nucleon dispersion relation and the hyperon excited states	*	208
G. Costa and F. Ferrari – Polology and $ND^{-1}$ solutions in the multiple-	"	214
channel problems	"	218
J. S. Dowker – $\pi$ -Y resonances and K <sup>-</sup> absorption reactions	"	210
Libri ricevuti e Recensioni	>>	222
N. 2 - 16 Ottobre 1961		
W. D. McGlinn - Annihilation of polarized positrons in magnetized iron	pag.	225
S. A. AZIMOV, L. P. CHERNOVA, G. M. CHERNOV, V. M. CHUDAKOV and B. K. Nikishin – Investigation of azimuthal effects at multiple particle		
production	))	235
G. Ascarelli – Low-field breakdown in n-type germanium	>>	251
A. Bisi, A. Fasana, E. Gatti and L. Zappa - Positron annihilation in		
insulators	)>	266
D. H. Davis, M. Csejthey-Barth, J. Sacton, B. D. Jones, B. Sanjeevaiah		
and J. Zakrzewski - On the emission of neutral hyperons from K-inter-		
actions at rest with emulsion nuclei	>>	275
A. G. Fenton, R. M. Jacklyn and R. B. Taylor - Cosmic ray observations		
at 42 m w.e. underground at Hobart, Tasmania	>>	285
B. Bhowmik, D. P. Goyal and N. K. Yamdagni - The mass of the A <sup>0</sup> -hyperon	>>	296
S. HIGASHI, T. KITAMURA, Y. MISHIMA, S. MIYAMOTO, T. OSHIO, H. SHI- BATA and Y. WATASE – Extraordinary high-energy nuclear interactions		
of μ-mesons	>>	304
A. Hossain, M. F. Votruba and A. Wataghin – Multiple scattering measurements in nuclear emulsions exposed to momentum-analysed particle		
beams from the CERN proton synchrotron	>>	308
G. CARERI, F. DUPRÈ and I. MODENA - Magnetic deflection of positive ions		
in liquid helium at 0.2 °K	>>	318
D. I. FIVEL - Analytic properties of off-energy shell potential scattering		
amplitudes	>>	326
E. V. IVASH and R. F. SWEET - Mass anisotropy and planetary motion .	>>	352
A. E. A. WARBURTON and M. GOURDIN - The isoscalar amplitudes for		
meson photoproduction	>>	362
S. Franchetti - On the structure of liquid 4He from the elastic scattering		
of neutrons	*	374
M. Froissart - Simplification of the two-body unitarity relation	>>	395
P. P. CRAIG, R. D. TAYLOR and D. E. NAGLE - Mössbauer effect measure-		
ments on superconducting indium.	>>	402
B. De Tollis and A. Verganelakis – The effect of a pion-pion interaction on the $\pi^0$ photoproduction		
on the $\pi^0$ photoproduction	*	406
of the perturbation expansion in the theory of weak interactions		4.7
the perturbation expansion in the theory of weak interactions	, »	414

Lettere alla Redazione:		
C. Pellegrini - The total energy-momentum vector of a closed system in general relativity	73.00	427
P. K. Kabir – The spin of the μ-meson		
P. E. KAUS and W. K. R. WATSON - Composite pions	**	429
	*	432
S. S. DHARMATTI, V. UDAYA SHANKAR RAO and R. VIJAYARAGHAVAN -		
Knight shifts in the intermetallic compound $\operatorname{PtSn}_2$	>>	435
C. Ceolin and R. Stroffolini - Some remarks about low-energy pion-pion		
scattering	>>	437
Libri ricevuti e Recensioni	>>	441
N. 3 - 1º Novembre 1961		
Y. P. Varshni and R. N. Bhargava – Equations for alpha-disintegration		
energies	pag.	449
A. Choudhury - On magnetic and luminescent centres induced in the		
crystal of lithium fluoride by X-ray irradiation	>>	457
C. Manduchi e G. Zannoni – Sul decadimento per cattura elettronica del $^{\rm 37}{\rm A}$	>>	462
A. Levi – The angle of divergence of pairs produced by photons in a crystal	>>	471
S. Yamaguchi - Thermomagnetic study of metals by electron diffraction .	>>	487
V. T. Cocconi, T. Fazzini, G. Fidecaro, M. Legros, N. H. Lipman and		
A. W. Merrison - A redetermination of the Panofsky ratio	>>	494
J. BAKOS and K. KÁNTOR - Light diffraction on slits in case of light		
sources of finite extension	>>	519
P. L. AUER and J. A. NATION - Magneto-compressional disturbance in a		
tepid plasma	>>	533
P. L. Auer - The role of ion currents in the formation of space charge		
sheaths in a low pressure arc	*	548
M. E. Rose and R. H. Good jr Uniqueness of the electron polarization		
operator	>>	565
D. AMATI, S. FUBINI, A. STANGHELLINI and M. TONIN - A theoretical		
approach to high-energy pion phenomena	>>	569
R. Karplus and Y. Yamaguchi - Quasi-elastic nucleon-nucleus scattering		
at high energy	>>	588
ALLADI RAMAKRISHNAN, G. BHAMATHI, S. INDUMATHI, T. K. RADHA and		
R. Thunga – Some consequences of spin $\frac{3}{2}$ for $\Xi$	>>	604
H. Kolbenstvedt and H. Olsen - Momentum-spin correlations in photo-		
electric effect and in single quantum positron annihilation	>>	610
H. GELERNTER - The automatic collection and reduction of data for nuclear		
spark chambers	"	631
D. M. Fradkin and R. H. Good jr Tensor operator for electron polarization	*	643
	"	0.10
Lettere alla Redazione:		
B. Hahn - The fracture of liquids under stress due to ionizing particles .		650
N. N. Biswas – Y* and two-nucleon K <sup>-</sup> -captures		654
M. FIDECARO, G. FINOCCHIARO and G. GIACOMELLI - Search for magnetic		
monopoles		657
P. Roman - On the gauge invariant theory of elementary-particle interactions	>>	660

#### N. 4 - 16 NOVEMBRE 1961

G. Allegra – Il calcolo dell'intensità di diffrazione dei raggi A da parte di strutture denotanti disordine monodimensionale - II: Applicazioni		
della teoria ad alcuni modelli strutturali con disordine monodimensionale	nag	661
J. S. Lomont - Conformal invariance of massless Dirac-like wave equations	Pas.	673
A. W. Hendry – On the analyticity of partial wave amplitudes for unstable		
particles in perturbation theory	>>	680
I. KAY and H. E. Moses - The determination of the scattering potential		
from the spectral measure function - V: The Gelfand-Levitan equation		
for the three-dimensional scattering problem	>>	689
G. ZIN - Teoria generale della radiazione di Čerenkov	>>	706
A. A. Evett - Static gravitational fields in general relativity	>>	779
T. Ohkawa and W. D. Kerst - Multipole magnetic field configurations		
for stable plasma confinement	>>	784
B. Peters - Primary cosmic radiation and extensive air showers	))	800
A. Loria, P. Mittner, R. Santangelo, I. Scotoni, G. Zago, B. Aubert,		
A. Brenner, Y. Goldschmidt-Clermont, F. Grard, G. R. MacLeod,		
A. MINGUZZI RANZI and L. MONTANET - The scattering of positive		020
120 MeV pions on protons	>>	820
Lettere alla Redazione:		
S. Dembinski - Remarks on complex singularities of the vertex function		
and Nakanishi's conjecture	>>	844
G. Bonera, P. De Stefano and A. Rigamonti - Investigation of styrene		
polymerization by means of nuclear magnetic relaxation measurements.	>>	847
E. Dahl-Jensen, M. Gailloud, W. O. Lock and G. Vanderhaeghe - Two		
modes of measuring spurious scattering in nuclear emulsions	>>	850
B. Antolković - Protons from 32S bombarded by 14.4 MeV neutrons	>>	853
J. H. HETHERINGTON and D. G. RAVENHALL - Scattering of low-energy		
K-mesons by nuclei	>>	856
A. Hossain, M. F. Votruba, A. Wataghin and D. Evans - On the behaviour		
of the multiple scattering constant, K, for nuclear emulsions, at large		
cell sizes	>>	861
P. Carruthers – Integral equations for the process $3\pi \rightarrow 3\pi$	>>	864
G. Da Prato and G. Putzolu – Three-pion form factor from electron-	>>	867
positron experiments		070
W. Królikowski – Possible interpretation of the 1815 MeV K <sup>-</sup> p resonance	>>	870
as a $\overline{K}^*N$ bound state	>>	872
S. KAWATA and T. ARAGAKI - Multiple-wire spark counters for counting	"	012
$\alpha$ -particles and neutrons	>>	875
A. CAMPOLATTARO and M. MARINARO - Some remarks on the Wick product	"	0.0
of interacting fields	))	879
		0.0
Libri ricevuti e Recensioni	11	884
	"	004

### N. 5 - 1º DICEMBRE 1961

Υ.	N. Kim – The effects of the nuclear charge polarization on the elastic		
	scattering	pag.	885
	Monnig - Search for a mass-550 particle	>>	895
	Iwao and J. Leitner – The pion spectrum in radiative hyperon decay	>>	904
V.	Ambegaokar and L. P. Kadanoff - Electromagnetic properties of		
	superconductors	>>	914
L.	W. Anderson - The Stark shift of the hyperfine structure of an atom		
	with a ${}^2S_{\frac{1}{2}}$ ground state	>>	936
E.	M. Dewan - Remarks on the derivation of the Lorentz transformation	>>	943
	CERULUS - Statistical theory of multiple meson production with angular		
	momentum conservation	>>	958
В.	T. Feld and D. B. Lichtenberg - A possible means to obtain evidence		
	concerning the spin of the K'-meson	>>	996
Ρ.	ROMAN - Correlation theory of stationary electromagnetic fields - Part IV:		
	Second order conservation laws	))	1005
F.	ENGELMANN, M. FEIX, E. MINARDI and J. OXENIUS – On the diffusion		
	of an electric field in a collisionless plasma	))	1012
V.	N. Khuri – A relativistic scattering model satisfying unitarity, crossing		
71,	symmetry and analyticity	))	1023
T	BIALYNICHI-BIRULA and W. M. FRANK – Convergence of the pertur-	"	1020
1.	bation expansion in some models of the field theory	· >>	1039
C	CHARPAK, F. J. M. FARLEY, R. L. GARWIN, T. MULLER, J. C. SENS	"	1000
G.	and A. Zichichi – A new limit to the electric dipole moment of the muon		1043
TT	REEH und S. Schlieder – Bemerkungen zur Unitäräquivalenz von	**	1049
н.			1051
73	Lorentzinvarianten Feldern	>>	1091
R.	CESTER, G. CIOCCHETTI, A. DEBENEDETTI, A. MARZARI CHIESA, G. RI-		
	Naudo, C. Deney, K. Gottstein and W. Püschel – $\Lambda^0$ 's from $K^-$ capture		1000
	in emulsion	))	1069
Tiet	tere alla Redazione:		
	FERRO-LUZZI, D. H. MILLER, J. J. MURRAY, A. H. ROSENFELD and		
1/1.	R. D. Tripp – Analysis of 1347 $\tau^-$ decays	>>	1(87
a	Gallone – Un metodo per la ricerca delle configurazioni di equilibrio	"	11 01
5.			1093
*	nel modello a goccia	>>	16.39
Li.			1097
	lation of the Fermi interaction	*	
D.	BOCCALETTI and F. SELLERI - Some remarks on double photoproduction	))	1099
Ρ.	L. Jain – Energetic electromagnetic cascade produced in a high-energy		1101
	nucleon-nucleon interaction	>>	1104
Tál	ri ricevuti e Recensioni	>>	1111
1100	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	N. 6 - 16 DICEMBRE 1961		
В.	Sakita – Angular correlations in $K^-+p \rightarrow \Lambda^0+\pi^++\pi^-$	pag.	1113
S.	Iwao – A theory of hyperfragments - II		1124

C. M. GARELLI, A. MARZARI CHIESA, G. RINAUDO and M. VIGONE -		
Interactions of 1.15 GeV/c K <sup>-</sup> -mesons in emulsion - III	pag.	1152
V. L. Fitch, P. A. Piroué and R. B. Perkins – Mass difference of neutral		
K-mesons	>>	1160
D. ABELEDO, L. CHOY, R. G. AMMAR, N. CRAYTON, R. LEVI SETTI,		
M. RAYMUND and O. SKJEGGESTAD - Mesic decays of hypernuclei		
from K-capture	>>	1171
M. Giannini, D. Prosperi and S. Sciuti – Nuclear resonance fluorescence		
in solid 60Co sources	>>	1197
E. ABATE, G. BELLINI, E. FIORINI and S. RATTI – Monte Carlo calculations		
on interactions of 300 MeV protons with carbon	>>	1206
E. Erba, U. Facchini and E. Saetta Menichella – Statistical emission		
in nuclear reactions and nuclear level density	· »	1237
D. Brini, M. Galli, G. L. Tabellini, U. Ciriegi and A. Gandolfi -		
On a G. M. counting rate increase recorded at balloon altitude	>>	1261
R. Cester – Characteristics of $\Lambda^0$ produced in carbon nuclei by 1.3 GeV $\pi^-$	>>	1267
A. CESTER - Characteristics of At produced in curron fueld by 1.5 See 1		
Lettere alla redazione:		
T. TAKEMIYA and Y. SAKAMOTO - Scattering of high-energy nucleons		
by heavier nuclei	>>	1284
A. Salam and J. Tiomno – Isotopic spin relations in hyperon production	»	1287
R. N. Peacock, B. Hahn, E. Hugentobler and F. Steinrisser – Total	-11	1201
inelastic cross-section for negative pions and protons in Cu, Cd, and Pb at		
high energies	>>	1290
P. Prakash – On the decay $\Sigma^0 \to \Lambda^0 + \gamma$ in the charge-independent pion	1/2	1200
interaction	>>	1293
Y. W. Kang, N. Kwak, J. Schneps and P. A. Smith $-\pi^+$ decay of a ${}^4{\rm He}_{\Delta}$	"	1200
hyperfragment	>>	1297
D. E. Evans and R. R. Hillier – Energy-dependence of fragmentation	"	1201
parameters	>>	1300
Z. Fried - A note on non-linear effects in electrodynamics	»	1303
E. Galzenati and M. Pusterla – A coupled analysis of the $I=\frac{3}{2},\ J=\frac{3}{2},$	"	1000
P and $D$ waves in pion-nucleon scattering	>>	1306
Saclay-Orsay-Bari-Bologna Collaboration - Diffraction scattering	"	1900
of 1.6 GeV/c $\pi^-$ on p for small momentum transfer	>>	1316
C. Gualdi - Proton energy spectra in the Drell model of double photo-	//	1010
production	>>	1313
M. Carrassi and G. Passatore - Remarks on a possible method for	"/-	1916
detecting the double Compton effect	>>	1316
P. Budini and T. Weber - Gauge invariance of form factors	»	1321
E. Leader - The «photon-spurion» and dispersion theory		1324
G. Costa and A. H. Zimerman – Some remarks about the isovector form	**	1045
factors of the nucleons and the $\rho^0$ meson		1296
the p mostle	>>	1326
I that advanced a December 1		
Libri ricevuti e Recensioni	>>	1329
Indici del Volume XXII, Serie X, 1961	>>	133

# INDICE ALFABETICO DEGLI AUTORI

La sigla L. si riferisce alle Lettere alla Redazione.

ABATE E., G. BELLINI, E. FIORINI and S. RATTI - Monte Carlo calculations		
on interactions of 300 MeV protons with carbon	pag.	1206
Abbattista N. (vedi Alitti J.) (L.)	*	1310
ABELEDO D., L. CHOY, R. G. AMMAR, N. CRAYTON, R. LEVI SETTI,		
M. RAYMUND and O. SKJEGGESTAD - Mesic decays of hypernuclei from		
K-capture. III: Characteristics of the parent stars	))	1171
ALEXANDER G. (vedi Eisenberg Y.)	>>	1
ALITTI J., V. ALLES-BORELLI, J. P. BATON, A. BERTHELOT, U. BIDAN,		
A. DAUDIN, B. DELER, O. GOUSSU, M. A. JABIOL, F. LEVY, C. LEWIN,		
M. Neveu-René, A. Rogozinski, F. Shively, J. Laberrigue-Frolow,		
O. Ouannes, M. Sené, L. Vigneron, N. Abbattista, S. Mongelli,		
A. Romano, E. Benedetti, J. Litvak, G. Puppi, P. Waloschek and		
M. Whitehead - (Saclay-Orgay-Bari-Bologna Collaboration) - Dif-		
fraction scattering of 1.6 GeV/c $\pi^-$ on p for small momentum transfer (L.)	>>	1310
Allegra G. – Il calcolo dell'intensità di diffrazione dei raggi X da parte di		
strutture denotanti disordine monodimensionale II: Applicazioni della		
teoria ad alcuni modelli strutturali con disordine monodimensionale	>>	661
Alles-Borelli V. (vedi Alitti J.) (L.)	>>	1310
AMATI D., S. FUBINI, A. STANGHELLINI and M. TONIN - A theoretical		
approach to high-energy pion phenomena	>>	569
Ambegaokar V. and L. P. Kadanoff - Electromagnetic properties of		0.4
superconductors	>>	914
AMMAR R. G. (vedi ABELEDO D.)	>>	1171
Anderson L. W. – The Stark shift of the hyperfine structure of an atom		0.00
with a ${}^2S_{\frac{1}{2}}$ ground state	)>	936
Antolković B. – Protons from <sup>32</sup> S bombarded by 14.4 MeV neutrons (L.)	»	853
ARAGAKI T. (vedi KAWATA S.) (L.)	»	875
ASCARELLI G. – Low-field breakdown in n-type germanium	*	$\frac{251}{820}$
Aubert B. (vedi Loria A.)	>>	020
sheaths in a low pressure arc	**	548
AUER P. L. and J. A. Nation – Magneto-compressional disturbance in	"	DIO
a tepid plasma	>>	533
AZIMOV S. A., L. P. CHERNOVA, G. M. CHERNOV, V. M. CHUDAKOV and	"	000
B. K. Nikishin – Investigation of azimuthal effects at multiple particle		
production	>>	235
Bakos J. and K. Kántor – Light diffraction on slits in case of light sources		
of finite extension	>>	519
BARLOUTAUD R. (vedi GRARD F.) (L.)	>>	193
BATON J. P. (vedi Alitti J.) (L.)	*	1310
BELLINI G. (vedi Abate E.)	>>	1206
BENEDETTI E. (vedi Alitti J.) (L.)	*	1310
BERTHELOT A. (vedi Alitti J.) (L.)	*	1310

0

BHAMATHI G. (vedi RAMAKRISHNAN A.)	pag.	604
BHARGAVA R. N. (vedi Varshni Y. P.)	>>	449
BHOWMIK B., D. P. GOYAL and N. K. YAMDAGNI – The mass of the $\Lambda^0$ -		
hyperon	>>	296
BIALYNICKI-BIRULA I. and W. M. FRANK – Convergence of the perturbation		
BIALYNICKI-BIRULA I. and W. M. FRANK - Convergence of the perturbation	>>	1039
expansion in some models of the field theory		1310
BIDAN U. (vedi Alitti J.) (L.)	>>	1310
BIEDENHARN L. C. – Some remarks on the Feynman-Gell-Mann formulation		* 0.0 -
of the Fermi interaction (L.)	))	1097
BISI A., A. FASANA, E. GATTI and L. ZAPPA - Positron annihilation in		
insulators	>>	266
Biswas N. N Y* and two-nucleon K captures (L.)	))	654
BOCCALETTI D. and F. SELLERI - Some remarks on double photo-		
production (L.)	>>	1099
BONERA G., P. DE STEFANQ and A. RIGAMONTI – Investigation of styrene		
polymerization by means of nuclear magnetic relaxation meas-		
urements (L.)	>>	847
Brenner A. (vedi Loria A.)	»	820
	77	021
BRINI D., M. GALLI, G. L. TABELLINI, U. CIRIEGI and A. GANDOLFI - On a		1301
G.M. counting rate increase recorded at balloon altitude	>>	1261
Brown L. M Analytic properties of n-point loops in perturbation theory	))	178
BUDINI P. and T. Weber - Gauge invariance of form factors	>>	1321
CAMPOLATTARO A. and M. MARINARO - Some remarks on the Wick product		
of interacting fields (L.)	>>	879
CARERI G., F. DUPRÈ and I. MODENA - Magnetic deflection of positive		
ions in liquid helium at 0.2 °K	>>	318
CARRASSI M. and G. PASSATORE - Remarks on a possible method for detecting		
the double Compton effect	>>	1316
Carruthers P. – Integral equations for the process $3\pi \rightarrow 3\pi$ (L.)	>>	867
CEOLIN C. and R. Stroffolini – Some remarks about low-energy pion-pion		001
scattering (L.)	>>	437
Cerulus F Statistical theory of multiple meson production with angular	"	401
		0.50
momentum conservation	))	958
CESTER R. – Characteristics of $\Lambda^0$ produced in carbon nuclei by 1.3 GeV $\pi^-$	))	1267
CESTER R., G. CIOCCHETTI, A. DEBENEDETTI, A. MARZARI CHIESA, G. RI-		
NAUDO, C. DENEY, K. GOTTSTEIN and W. PÜSCHEL - Aº's from K		
capture in emulsion	>>	1069
CHARPAK G., F. J. M. FARLEY, R. L. GARWIN, T. MULLER, J. C. SENS,		
V. L. Telegdi, C. M. York and A. Zichichi - Quenching of muon		
depolarization by weak magnetic fields (L.)	)>	199
CHARPAK G., F. J. M. FARLEY, R. L. GARWIN, T. MULLER, J. C. SENS and		
A. Zichichi - A new limit to the electric dipole moment of the muon	>>	1043
CHERNOV G. M. (vedi Azimov S. A.)	>>	235
CHERNOVA L. P. (vedi Azimov S. A.)	»	235
Choquet C. (vedi Grard F.) (L.)		193
CHOUDHURY A On magnetic and luminescent centres induced in the	>>	130
crystal of lithium fluoride by X-ray irradiation		12-
CHOY L. (vedi Arriero D)	))	457
CHUDAKOV V. M. (vedi AZIMOV S. A.)	>>	1171
CHUDAKOV V. M. (vedi AZIMOV S. A.)	>>	238
CIDECHETTI G. (vedi CESTER R.)	>>	1069
Ciriegi U. (vedi Brini D.)	>>	1261

COCCONI V. T., T. FAZZINI, G. FIDECARO, M. LEGROS, N. H. LIPMAN and		
A. W. Merrison - A redetermination of the Panofsky ratio	pag.	494
COSTA G. and F. FERRARI - Polology and ND-1 solutions in the multiple-	,	
channel problems (L.)		214
Costa G. and A. H. Zimerman - Some remarks about the isovector form		
factors of the nucleons and the $\rho^0$ meson	9	1326
Craig P. P., R. D. Taylor and D. E. Nagle - Mössbauer effect measure-		
ments on superconducting indium	*	402
CRAYTON N. (vedi Abeledo D.)	>	1171
Cresti M. (vedi Grard F.) (L.)	1)	193
CSEJTHEY-BARTH M. (vedi DAVIS D. H.)	)	275
DAHL-JENSEN E., M. GAILLOUD, W. O. LOCK and G. VANDERHAEGE		
Two modes of measuring spurious scattering in nuclear emulsions (L.)	*)	850
DA PRATO G Single pion production in proton-proton collisions according		
to the one-particle exchange model	1)	123
DA PRATO G. and G. PUTZOLU - Three-pion form factor from electron-		0=0
positron experiments (L.)	.)	870
DAUDIN A. (vedi ALITTI J.) (L.)	>>	1310
DAVIS D. H., M. CSEJTHEY-BARTH, J. SACTON, B. D. JONES, B. SANJEEVALAH		
and J. Zakrzewski – On the emission of neutral hyperons from K interactions at rest with emulsion nuclei		.) = ~
Debenedetti A. (vedi Cester R.)	")	275 1069
DELER B. (vedi Alitti J.) (L.)	,)	1310
DEMBINSKI S Remarks on complex singularities of the vertex function	")	1.010
and Nakanishi's conjecture (L.)		844
Deney C. (vedi Cester R.)		1069
DE STEFANO P. (vedi BONERA G.) (L.)	,)	847
DE TOLLIS B. and A. VERGANELAKIS – The effect of a pion-pion interaction		
on the $\pi^0$ photoproduction	>>	406
DEWAN E. M Remarks on the derivation of the Lorentz transformation	"	943
Dharmatti S. S., V. Udaya Shankar Rao and R. Vijayaraghayan		
Knight shifts in the intermetallic compound PtSn <sub>2</sub> (L.)	")	43.5
Dowker J. S. – $\pi$ -Y resonances and K <sup>-</sup> absorption reactions (L.)	))	218
Duprè F. (vedi Careri G.)	))	318
EISENBERG Y., M. FRIEDMANN, G. ALEXANDER and D. KESSLER - On the		
multi-nucleon capture of K-mesons	**	1
EMMA V., C. MILONE, A. RUBBINO, S. JANNELLI and A. MEZZANARES		
Energy spectrum of photoneutrons from cobalt	*	135
ENGELMANN F., M. FEIX, E. MINARDI and J. OXENIUS - On the diffusion		
of an electric field in a collisionless plasma	*)	1012
Erba E., U. Facchini and E. Saetta Menichella - Statistical emission		
in nuclear reactions and nuclear level density	))	1237
EVANS D. E. and R. R. Hillier - Energy-dependence of fragmentation		
parameters (L.)	))	1300
Evans D. (vedi Hossain A.) (L.)	,>	861
EVETT A. A Static gravitational fields in general relativity	1)	779
FACCHINI U. (vedi Erba E.)	>>	1237
FARLEY F. J. M. (vedi CHARPAK G.) (L.)	1)	199
FARLEY F. J. M. (vedi CHARPAK G.)	1)	1043
FASANA A. (vedi BISI A.)	))	$\frac{266}{494}$
PARTINI TO TOOL COCCONI VIII	1)	+174

FEIX M. (vedi Engelmann F.)	pag.	1012
concerning the spin of the K'-meson	0	996
at 42 m w.e. underground at Hobart, Tasmania		285
FERRARI F. (vedi Costa G.) (L.)	9	214
FERRO-LUZZI M., D. H. MILLER, J. J. MURRAY, A. H. ROSENFELD and		
R. D. TRIPP - Analysis of 1347 $\tau^-$ decays (L.)	,	1087
FIDECARO G. (vedi Cocconi V. T.)	1)	494
FIDECARO M., G. FINOCCHIARO and G. GIACOMELLI - Search for magnetic		
monopoles (L.)	0	657
FINOCCHIARO G. (vedi FIDECARO M.) (L.)	,,	657
FIORINI E. (vedi Abate E.)	1)	1206
FITCH V. L., P. A. PIROUÉ and R. B. PERKINS – Mass difference of neutral		1200
	,	1160
K-mesons		1100
		326
'amplitudes	9	643
FRADKIN D. M. and R. H. Good jr Tensor operator for electron polarization	<b>)</b>	040
FRANCHETTI S On the structure of liquid 4He from the elastic scattering		974
of neutrons	"	374
Frank W. M. (vedi Bialynicki-Birula I.)	9	1039
FRIED Z A note on non-linear effects in electrodynamics (L.)	•>	1303
FRIEDMANN M. (vedi EISENBERG Y.)	*)	1
FROISSART M. – Elimination of the inelastic cut in the $N/D$ method (L.)	13	191
FROISSART M Simplification of the two-body unitarity relation	4)	395
FUBINI S. (vedi Amati D.)	)	569
Gaillard JM. (vedi Grard F.) (L.)	1)	193
GAILLOUD M. (vedi Dahl-Jensen E.) (L.)	1)	850
Galli M. (vedi Brini D.)	,	1261
GALLONE S Un metodo per la ricerca delle configurazioni di equilibrio		
nel modello a goccia (L.)	- 0	1093
GALZENATI E. and M. Pusterla – A coupled analysis of the $I = \frac{3}{2}$ , $J = \frac{3}{2}$ .		
P and $D$ waves in pion-nucleon scattering (L.)	1	1306
GANDOLFI A. (vedi Brini D.)	15	1261
GARELLI C. M., A. MARZARI CHIESA, G. RINAUDO and M. VIGONE - Inter-		
actions of 1.15 GeV/c K -mesons in emulsion - III	+)	1152
GARWIN R. L. (vedi Charpak G.) (L.)	+)	199
GARWIN R. L. (vedi Charpak G.)	1)	1043
Gatti E. (vedi Bisi A.)	1)	266
GELERNTER H The automatic collection and reduction of data for		
nuclear spark chambers	1)	631
GIACOMELLI G. (vedi Fidecaro M.) (L.)	1)	657
GIANNINI M., D. PROSPERI and S. SCIUTI - Spin and parities of excited		0.1
levels in <sup>212</sup> Po	))	31
in solid 60Co sources		110=
in solid 60Co sources	))	1197
GOOD R. H. ir. (vedi Frankin D. M.)	>>	820
Good R. H. jr. (vedi Frankin D. M.)	>>	643
GOOD R. H. jr. (vedi ROSE M. E.)	>>	565
GOURDIN M. (vedi Warrington A. F. A.)	>>	1069
GOURDIN M. (vedi Warburton A. E. A.)	>>	362

Goussu O. (vedi Alitti J.) (L.)	pag.	1310
GOVE N. B. and R. NAKASIMA - On reaction cross-sections with 14 MeV	10	
neutrons	>)	158
GOYAL D. P. (vedi BHOWMIK B.)	>>	296
GRARD F., G. MACLEOD, L. MONTANET, M. CRESTI, R. BARLOUTAUD.		
C. Choquet, JM. Gaillard, J. Heughebaert, A. Leveque, P. Leh-		
Mann, J. Meyer and D. Revel – $\pi^-$ -proton scattering at 516, 616,		
710, 887 and 1085 MeV (L.)	1)	193
GRARD F. (vedi Loria A.)	"	820
Gualdi C Proton energy spectra in the Drell model of double photo-		
production (L.)	13	1313
HACK M. N Interference effects on radiofrequency fields in resonance		
radiation	0	168
Hahn B The fracture of liquids under stress due to ionizing particles (L.)	>	650
Hahn B. (vedi Peacock R. N.) (L.)	,	1290
HENDRY A. W On the analyticity of partial wave amplitudes of unstable		
particles in perturbation theory	ю	680
HETHERINGTON J. H. and D. G. RAVENHALL - Scattering of low-energy		
K <sup>-</sup> -mesons by nuclei (L.)	9	856
Heughebaert J. (vedi Grard F.) (L.)	17	193
Higashi S., T. Kitamura, Y. Mishima, S. Miyamoto, T. Oshio, H. Shibata		
and Y. Watase - Extraordinary high-energy nuclear interactions of		
μ-mesons	13	304
HILLIER R. R. (vedi Evans D. E.) (L.)	"	1300
Hossain A., M. F. Votruba and A. Wataghin - Multiple scattering		
measurements in nuclear emulsions exposed to momentum-analysed		200
particle beams from the CERN proton synchrotron	,	308
of the multiple scattering constant, K, for emulsion, at large cell sizes (L.)	,,	861
HUGENTOBLER E. (vedi Peacock R. N.) (L.)	"	1290
IGI K. and H. SHIMOIDA – Kaon-nucleon dispersion relation and the hyperon		1200
excited states (L.)	))	208
Indumathi S. (vedi Ramakrishnan A.)	1)	604
IVASH E. V. and R. F. SWEET - Mass anisotropy and planetary motion	))	352
IWAO S A theory of hyperfragments II: Mesic decay of hyperfragments	2)	1124
IWAO S. and J. LEITNER - The pion spectrum in radiative hyperon decay	*>	904
Jabiol M. A. (vedi Alitti J.) (L.)	п	1310
JACKLYN R. M. (vedi Fenton A. G.)	,	285
JAIN P. L Energetic electromagnetic cascade produced in a high-energy		
nucleon-nucleon interaction (L.)	>)	1104
Jannelli S. (vedi Emma V.)	3)	135
JONES B. D. (vedi DAVIS D. H.)	+)	275
KABIR P. K. – The spin of the $\mu$ -meson (L.)	1)	429
KADANOFF L. P. (vedi AMBEGAOKAR V.)	*>	914
KANG Y. W., N. KWAK, J. SCHNEPS and P. A. SMITH – $\pi^+$ decay of a $^4{\rm He}_\Lambda$		1.00-
hyperfragment (L.)	33	1297 519
KARPLUS R. and Y. Yamaguchi - Quasi-elastic nucleon-nucleus scattering	>)	1717
at high energy.	**	588
KAUS P. E. and W. K. R. WATSON - Composite pions (L.)	1)	432
T T		

KAY I. and H. E. Moses - The determination of the scattering potential		
from the spectral measure function V: The Gelfand-Levitan equation		
for the three-dimensional scattering problem	pag.	689
KAWATA S. and T. ARAGAKI - Multiple-wire spark counters for counting		
α-particles and neutrons (L.)	0	875
Kerst W. D. (vedi Ohkawa T.)	,	784
Kessler D. (vedi Eisenberg Y.)	,	1
KHURI N. N. – A relativistic scattering model satisfying unitarity, crossing		
symmetry and analyticity	)	1023
Kim Y. N The effects of the nuclear charge polarization on the elastic		
scattering	,	885
KITAMURA T. (vedi Higashi S.)	,	304
Kolbenstvedt H. and H. Olsex Momentum-spin correlations in photo-		
electric effect and in single quantum positron annihilation	,	610
Królikowski W. – Possible interpretation of the 1812 MeV K p resonance		
as a K*N bound state (L.)	,	872
		1297
KWAK N. (vedi KANG Y. W.) (L.)		1310
LABERRIGUE-FROLOW J. (vedi Alitti J.) (L.)	,	1324
LEADER E The «photon-spurion» and dispersion theory (L.)	)	
Legros M. (vedi Cocconi V. T.)	0	494
LEHMANN P. (vedi Grard F.) (L.)	D	193
LEITNER J. (vedi Iwao S.)	,	904
LEVEQUE A. (vedi Grard F.) (L.)		193
LEVI A The angle of divergence of pairs produced by photons in a crystal	3	471
LEVI SETTI R. (vedi Abeledo D.)	0	1171
LEVY F. (vedi Alitti J.) (L.)	)	1310
LEWIN C. (vedi Alitti J.) (L.)	)	1310
LICHTENBERG D. B. (vedi Feld B. T.)	1	996
LIPMAN N. H. (vedi Cocconi V. T.)	3	494
Litvak J. (vedi Aliatti J.) (L.)		1310
LOCK W. O. (vedi Dahl-Jensen E.) (L.)	+)	850
Lomont J. S Conformal invariance of massless Dirac-like wave equations	)	673
LORIA A., P. MITTNER, R. SANTANGELO, I. SCOTONI, G. ZAGO, B. AUBERT.		
A. Brenner, Y. Golschmidt-Clermont, F. Grard, G. R. MacLeod,		
A. Minguzzi Ranzi and L. Montanet - The scattering of positive		
120 MeV pions on protons	3	820
LOYELACE C On the existence of solutions of pion-pion dispersion		
equations II	-)	102
MacLeod G. (vedi Grard F.) (L.)	)	193
MACLEOD G. R. (vedi Loria A.)	)	820
Manduchi C. e G. Zannoni – Sul decadimento per cattura elettronica		0-1
del 37A	۸	462
Marinaro M. (vedi Campolattaro A.) (L.)		879
Marzari Chiesa A. (vedi Garelli C. M.).	>>	
Marzari Chiesa A. (vedi Cester R.).	1)	1152
McGLINN W. D Annihilation of polarized positrons in magnetized iron	))	1069
MERRISON A. W. (vedi Cocconi V. T.)	3)	225
MEYER J. (vedi Grard F.) (L.)	1)	494
MEZZANARES A. (vedi EMMA V.)	1)	193
MICHEL L Relations between polarizations due to charge independence (L.)	1)	135
MILLER D. H. (vedi Ferro-Luzzi M.) (L.)	>>	203
2. 21. ( vod. 1 Elito-130221 M.) (L.)	1)	-1087

MILONE C. and R. RICAMO - Differential cross-section for the D(d, n)		
reaction	pag.	116
MILONE C. (vedi Emma V.)	,	135
MINARDI E. (Vedi Engelmann F.)	*>	1012
Minguzzi Ranzi A. (vedi Loria A.)	1)	820
Mishima Y. (vedi Higashi S.)	3)	304
MITTNER P. (vedi Loria A.)	1)	820
Miyamoto S. (vedi Higashi S.)	))	304
Modena I. (vedi Careri G.)	>)	318
Mongelli S. (vedi Alitti J.) (L.)	,)	1310
Monnig G Search for a mass-550 particle	1)	895
Montanet L. (vedi Grard F.) (L.)	13	193
Montanet L. (vedi Loria A.)	1)	820
Moses H. E. (vedi Kay I.)	))	689
Muller T. (vedi Charpak G.) (L.)	))	199
MULLER T. (vedi Charpak G.)	*>	1043
MURRAY J. J. (vedi Ferro-Luzzi M.) (L.)	))	1087
Nagle D. E. (vedi Craig P. P.)	>)	402
NAKASIMA R. (vedi Gove N. B.)	))	158
NATION J. A. (ved) AUER P. L.)	))	533
Neveu-René M. (vedi Alitti J.) (L.)	))	1310
Nikishin B. K. (vedi Azimov S. A.)	>>	23.5
Nilsson J The mass difference of the neutral K-mesons and the validity		
of the perturbation expansion in the theory of weak interactions	>>	414
Ohkawa T. and D. W. Kerst – Multipole magnetic field configurations		
for stable plasma confinement	))	784
Olsen H. (vedi Kolbenstvedt H.)	))	610
Oshio T. (vedi Higashi S.)	>>	304
Ouannes O. (vedi Alitti J.) (L.)	0)	1310
Oxenius J. (vedi Engelmann F.)	>>	1012
Passatore G. (vedi Carrassi M.) (L.)	))	1316
Peacock R. N., B. Hahn, E. Hugentobler and F. Steinrisser – Total		
inelastic cross-sections for negative pions and protons in Cu, Cd and Pb		
at high energies (L.)	))	1290
Pellegrini C. – The total energy-momentum vector of a closed system		
in general relativity (L.)	*>	427
Perkins R. B. (vedi Fitch V. L.)	1)	1160
Peters B Primary cosmic radiation and extensive air showers	>>	800
PIROUÉ P. A. (vedi Fitch V. L.)	1)	1160
Prakash P. – On the decay $\Sigma^0 \to \Lambda^0 + \gamma$ in the charge-independent pion		
interaction (L.)	>>	1293
Prosperi D. (vedi Giannini M.)	1)	31
Prosperi D. (vedi Giannini M.)	))	1197
Puppi G. (vedi Alitti J.) (L.)	>>	1310
PÜSCHEL W. (vedi Cester R.)	>>	1069
Pusterla M. (vedi Galzenati E.) (L.)	1)	1306
PUTZOLU G. (vedi Da Prato G.) (L.)	:)	870
RADHA T. K. (vedi RAMAKRISHNAN A.)	>>	604
RAMAKRISHNAN A., G. BHAMATHI, S. INDUMATHI, T. K. RADHA and		
R. Thunga – Some consequences of spin $\frac{3}{2}$ for $\Xi$	)>	604
RATTI S. (vedi Abate E.)	+)	1206

RAVENHALL D. G. (vedi Hetherington J. H.) (L.)	pag.	850
RAYMUND M. (vedi ABELEDO D.)	+)	1171
Reeh H. and S. Schlieder - Bemerkungen zur Unitäräquivalenz von		
Lorentzinvariaten Feldern	1)	1051
REVEL D. (vedi Grard F.) (L.)	,	193
RICAMO R. (vedi MILONE C.)	>	116
RIGAMONTI A. (vedi Bonera G.) (L.)	,	847
RINAUDO G. (vedi CESTER R.)	,	1069
RINAUDO G. (vedi GARELLI C. M.)	,	1152
Rogozinski A. (vedi Alitti J.) (L.)		1310
ROMAN P Correlation theory of stationary electromagnetic fields		
IV: Second order conservation laws	-	1005
ROMAN P. On the gauge invariant theory of elementary-particle interactions	,	660
ROMANO A. (vedi Alitti J.) (L.)	,	1310
Rose M. E. and R. H. Good jr Uniqueness of the electron polarization		
operator	- 0	565
ROSENFELD A. H. (vedi Ferro-Luzzi M.) (L.)	0	1087
Rubbino A. (vedi Emma V.)	)	135
Sacton J. (vedi Davis D. H.)	,	275
SAETTA MENICHELLA E. (vedi Erba E.)	1)	1237
SAKAMOTO Y. (vedi TAKEMIYA T.) (L.)		1284
Sakita B. – Angular correlations in K $+p \rightarrow \Lambda^0 + \pi^+ + \pi^-$	)	1113
SALAM A. and J. TIOMNO – Isotopic spin relations in hyperon production (L.)	,	1287
Salin Ph. – K-meson form factor in the bipion approximation	,	51
Sanjeevaiah B. (vedi Davis D. II.)	,)	27.5
Santangelo R. (vedi Loria A.)	>	820
Schiff M Transfer of negative muons to gases dissolved in a hydrogen		(/2
bubble chamber	,	66
SCHLIEDER S. (vedi Reeh H.)		1051
Schneps J. (ve'i Kang Y. W.) (L.)	,	1297
SCIUTI S. (vedi Giannini M.).	,	31
SCIUTI S. (vedi Giannini M.).	,	1197
SCOTONI I. (vedi Loria A.)	,	820
SELLERI F. (vedi Boccaletti D.) (L.).		1099
SENÉ M. (vedi Alitti J.) (L.)		1310
SENS J. C. (vedi Charpak G.) (L.)	,	1910
SENS J. C. (vedi Charpak G.)	,	1043
Shibata H. (vedi Higashi S.)	2)	304
Shimoida H. (vedi Igi K.) (L.).		208
Shinohara S Donor states and deformation around impurity atoms in	>	200
semiconductors		18
SHIVELY F. (vedi ALITTI J.) (L.)	)	
SILBAR R. and H. ÜBERALL – $V$ – $A$ or $V$ + $A$ interaction in $\mu$ -meson	1)	1310
capture? (L.)		0.01
capture? (L.)	1)	864
SKJEGGESTAD O. (vedi ABELEDO D.) SMITH P. A. (vedi KANG V. W.) (L.)	1)	1171
SMITH P. A. (vedi KANG Y. W.) (L.)	1)	1297
STANGHELLINI A. (vedi AMATI D.) STEINRISSER F. (vedi PRACOCK R. N.) (L.)	1)	569
STEINRISSER F. (vedi Peacock R. N.) (L.)	1)	1290
STROFFOLINI R. (vedi CEOLIN C.) (L.). SURÁNYI P. – On the experimental avidance f	>>	437
Surányi P. – On the experimental evidence for pion-pion interaction in high-energy $\pi$ - $\mathcal{N}$ and $\mathcal{N}$ - $\mathcal{N}$ events.		
and of the and of the state of	1)	40

SWEET R. F. (vedi Ivash E. V.)	nao	352
TABELLINI G. L. (vedi Brini D.)	»	1261
TAKEMIYA T. and Y. SAKAMOTO - Scattering of high-energy nucleons by	"	120
heavier nuclei (L.)	))	1284
Taylor J. G Analyticity and crossing for partial waves	»	92
TAYLOR R. B. (vedi Fenton A. G.)	" >>	288
TAYLOR R. D. (vedi Craig P. P.)	// >>	402
Telegdi V. L. (vedi Charpak G.) (L.)	)>	199
THUNGA R. (vedi RAMAKRISHNAN A.)	<i>''</i>	604
Tiomno J. (vedi Salam A.) (L.)		1287
TONIN M. (vedi Amati D.)	)>	569
TRIPP R. D. (vedi Ferro-Luzzi M.) (L.)		1087
ÜBERALL H. (vedi SILBAR R.) (L.)	)>	864
UDAYA SHANKAR RAO V. (vedi DHARMATTI S. S.) (L.)	))	$\frac{304}{435}$
Vanderhaege G. (vedi Dahl-Jensen E.) (L.)	)>	
Varshni Y. P. – Comparison of three equations for the spacing of nuclear	)>	850
levels		1.45
Varshni Y. P. and R. N. Bhargava – Equations for α-disintegration	)>	145
energies		4.40
energies	))	449
	))	406
VIGNERON L. (vedi Alitti J.) (L.)	<i>&gt;&gt;</i>	1310
VIGONE M. (vedi GARELLI C. M.)	>>	1152
VIJAYARAGHAVAN R. (vedi DHARMATTI S. S.) (L.)	)>	435
VOTRUBA M. F. (vedi Hossain A.)	>>	308
Votruba M. F. (vedi Hossain A.) (L.)	)>	861
		100
Gasmischungen II Mitteilung (L.)	>>	189
WALOSCHER P. (vedi ALITTI J.) (L.)	**	1310
WARBURTON A. E. A. and M. GOURDIN - The isoscalar amplitudes for meson		969
photoproduction	>>	362
WATAGHIN A. (vedi Hossain A.)	»	308
WATAGHIN A. (vedi Hossain A.) (L.)	>>	861
WATASE Y. (vedi Higashi S.)	*	304
WATSON W. K. R High-energy nucleon-nucleon collisions	>>	183
WATSON W. K. R. (vedi Kaus P. E.) (L.)	)>	432
Weber T. (vedi Budini P.) (L.)	>>	1321
WHITEHEAD M. (vedi Alitti J.) (L.)	,)	1310
Yamaguchi S. Thermomagnetic study of metals by electron diffraction	*)	487
YAMAGUCHI Y. (vedi R. KARPLUS)	>>	588
YAMDAGNI N. K. (vedi Bhowmik B.)	>>	296
YORK C. M. (vedi Charpak G.) (L.)	>>	199
Zago G. (vedi Loria A.)	>>	820
ZAKRZEWSKI J. (vedi Davis D. H.)	>>	275
ZANNONI G. (vedi MANDUCHI C.)		
	>>	462
MAPPA L. (vedi Bisi A.)	)>	266
Zappa L. (vedi Bisi A.)	» »	$\frac{266}{199}$
ZICHICHI A. (vedi CHARPAK G.) (L.)	» »	266 $199$ $1043$
ZAPPA L. (vedi BISI A.) ZICHICHI A. (vedi CHARPAK G.) (L.) ZICHICHI A. (vedi CHARPAK G.) ZIMERMAN A. H. (vedi COSTA G.) (L.) ZIN G. – Teoria generale della radiazione di Čerenkov	» »	$\frac{266}{199}$

# INDICE ANALITICO PER MATERIE

APPARATI - STRUMENTI - TECNICHE SPERIMENTALI

Angle of divergence of pairs produced by photons in a crystal (The),  A. Levi	pag.	471
Automatic collection and reduction of data for nuclear spark chambers		631
(The), H. Gelernter	,	().) [
taghin and D. Evans		861
I. Bakos and K. Kántor		519
E. Dahl-Jensen, M. Gailloud, W. O. Lock and G. Vanderhaeghe.  Multiple scattering measurements in nuclear emulsions exposed to momentum-analysed particle beams from the CERN proton synchrotron,	n	850
A. Hossain, M. F. Votruba and A. Wataghin	"	308
S. Kawata and T. $Aragaki$	·	875
pressure arc (The), P. L. Auer	**	548
chamber, M. Schiff	D.	66
Analysis of the $I=\frac{3}{2}$ , $J=\frac{3}{2}$ , $P$ and $D$ waves in pion-nucleon scattering (A coupled) (L.), $E$ . Galzenati and $M$ . Pusterla	4)	1306
Analyticity and crossing for partial waves, $J$ . $G$ . Taylor	13	92
Analytic properties of $n$ -point loops in perturbation theory, $L$ . $M$ . Brown Analyticity of partial wave amplitudes of unstable particles in pertur-	1)	178
bation theory (On the), A. W. Hendry	>>	680
H. Reeh und S. Schlieder Convergence of the perturbation expansion in some models of the field	•)	1051
theory, I. Bialynicki-Birula and W. M. Frank	1)	1039
order conservation laws, $P.$ $Roman$	**	1005
B. De Tollis and A. Verganelakis.	>>	406
Elimination of the inelastic cut in the $N/D$ method, $M$ . Froissart . Existence of solutions of pion-pion dispersion equations (On the) - II,	>>	191
C. Lovelace	))	102
The state of form factors (12.), F. Buains and P. Weber	)>	1321

Gauge invariant theory of elementary-particle interactions (On the),		
P. Roman	pag.	660
Integral equations for the process $3\pi$ - $3\pi$ (L.), P. Carruthers Isoscalar amplitudes for meson production (The), A. E. A. Warburton	*	867
and M. Gourdin	<b>&gt;&gt;</b>	362
Isovector form of the nucleons and the $\rho^0$ meson (Some remarks about the) (L.), G. Costa and A. H. Zimerman	))	1326
Kaon-nucleon dispersion relation and the hyperon excited states (L.),	"	1020
K. Igi and H. Shimoida	>>	208
Mass difference of the neutral K-mesons and the validity of the pertur-		414
bation expansion in the theory of weak interactions (The), J. Nilsson K-meson form factor in the bipion approximation, Ph. Salin	*)	414
Momentum-spin correlations in photoelectric effect and in single quantum	>>	51
positron annihilation, H. Kolbenstvedt and H. Olsen	>>	610
Non-linear effects in electrodynamics (Note on a) (L.), Z. Fried	))	1303
Photon-spurion and dispersion theory (The) (L.), E. Leader Possible method for detecting the double Compton effect (Remarks	*	1324
on a) (L.), M. Carrassi and G. Passatore	>>	1316
and analyticity (A), N. N. Khuri  Remarks on complex singularities of the vertex function and Nakanishi's	>>	1023
conjecture (L.), S. Dembinski	*	844
Search for magnetic monopoles (L.), M. Fidecaro, G. Finocchiaro and		
G. Giacomelli	>>	657
Simplification of the two-body unitarity relation, $M.$ Froissart Single pion production in proton-proton collisions according to the	*	395
one-particle exchange model, G. Da Prato	))	123
and R. Stroffolini	))	437
Some remarks on double photoproduction (L.), D. Boccaletti and F. Selleri Some remarks on the Feynman-Gell-Mann formulation of the Fermi	*)	1099
interaction (L.), L. C. Biedenharn	»	1097
lattaro and M. Marinaro	*>	879
Theoretical approach to high-energy pion phenomena (A), D. Amati, S. Fubini, A. Stanghellini and M. Tonin	))	569
ETTROMAGNETISMO		
Interference effects on radiofrequency fields in resonance radiation,		
M. N. Hack		168
Teoria generale della radiazione di Čerenkov, G. Zin	*	706
eroni e Ipernuclei		
Analysis of 1347 $\tau^-$ decays (L.), M. Ferro-Luzzi, D. H. Miller, J. J. Mur-		
ray, A. H. Rosenfeld and R. D. Tripp	>>	1087
Characteristics of $\Lambda^0$ produced in carbon nuclei by 1.3 GeV $\pi^-$ , R. Cester	))	1267

Eı

ΙP

Decay $\Sigma^0 \rightarrow \Lambda^0 + \gamma$ in the charge-independent pion interaction (On the) (L.), $P$ . $Prakash$	pag.	1293
Emission of neutral hyperons from K-interactions at rest with emulsion nuclei (On the), D. H. Davis, M. Csejthey-Barth, J. Sacton, B. D. Jones,		
B. Sanjeevalah and J. Zakrzewski	)}	275
Isotopic spin relations in hyperon production (L.), A. Salam and J. Tiomno A's from K -capture in emulsion, R. Cester, G. Ciocchetti, A. Debenedetti,	**	1287
A. Marzari Chiesa, G. Rinaudo, C. Deney, K. Gottstein and W. Püschel Mass of the A <sup>0</sup> -hyperon (The), B. Bhowmik, D. P. Goyal and N. K.	>>	1069
Vamdagni	"	296
Mesic decays of hypernuclei from K <sup>-</sup> -capture - III: Characteristics of the parent stars, D. Abeledo, L. Choy, R. G. Ammar, N. Crayton.		
R. Levi Setti, M. Raymund and O. Skjeggestad	>>	1171
and P. A. Smith	1)	1297
Pion spectrum in radiative hyperon decay (The), S. Iwao and J. Leitner Some consequences of spin $\frac{3}{2}$ for $\Xi$ , A. Ramakrishnan, G. Bhamathi,	1)	904
S. Indumathi, T. K. Radha and R. Thunga	,,	604
S. Iwao	))	1124
Y* and two-nucleon K <sup>-</sup> -captures (L.), N. N. Biswas	>>	654
LEPTONI		
Annihilation of polarized positrons in magnetized iron, W. D. McGlinn Extraordinary high-energy nuclear interactions of $\alpha$ -mesons, S. Higashi, T. Kitamura, Y. Mishima, S. Miyamoto, T. Oshio, H. Shibata and	))	225
Y. Watase	))	304
F. J. M. Farley, R. L. Garwin, T. Muller, J. C. Sens and A. Zichichi Quenching of muon depolarization by weak magnetic fields (L.), G. Charpak, F. J. M. Farley, R. L. Garwin, T. Muller, J. C. Sens, V. L. Te-	>>	1043
legdi, C. M. York and A. Zichichi	>>	199
Spin of the $\mu$ -meson (The) (L.), $P.~K.~Kabir.$	3)	429
Tensor operator for electron polarization, D. M. Fradkin and R. H. Good jr.  Three-pion form factor from electron-positron experiments (L.), G. Da	. "	643
Prato and G. Putzolu	>)	870
Uniqueness of electron polarization operator, M. E. Rose and R. H. Good jr. $V-A$ or $V+A$ interaction in $\mu$ -meson capture? (L.), R. Silbar and	, »	565
H. Überall	. »	864
MECCANICA CLASSICA E MECCANICA QUANTISTICA		
Analytic properties of off-energy shell potential scattering amplitudes,		
D. I. Fivel	, ))	326
Conformal invariance of massless Dirac-like wave equation, J. S. Lomont Determination of the scattering potential from the spectral measure function - V: The Gelfand-Levitan equation for the three-dimensional		673
scattering problem (The), I. Kay and H. E. Moses.	. >>	689

Polology and $ND^{-1}$ solutions in the multiple-channel problems (L.) G. Costa and F. Ferrari	, . pag.	214
Iesoni leggeri		
Composite pions (L.), $P.$ $E.$ $Kaus$ and $W.$ $K.$ $R.$ $Watson$ Diffraction scattering of 1.6 GeV/c $\pi^-$ on p for small momentum transfer	. ))	432
<ul> <li>(L.), Saclay-Orsay-Bari-Bologna Collaboration</li></ul>	,	1310
and D. Revel	, »	193
G. Fidecaro, M. Legros, N. H. Lipman and A. W. Merrison. Scattering of positive 120 MeV pions on protons (The), A. Loria P. Mittner, R. Santangelo, I. Scotoni, G. Zago, B. Aubert, A. Brenner Y. Goldschmidt-Clermont, F. Grard, G. R. Macleod, A. Minguzzi Ranz	. ))	494
and L. Montanet	. » l	820
tobler and F. Steinrisser		1290
LESONI PESANTI		
Angular correlations in $K^-+p \rightarrow \Lambda^0+\pi^++\pi^-$ , B. Sakita Interactions of 1.15 GeV/c $K^-$ -mesons in emulsion - III, C. M. Garelli,	. »	1113
A. Marzari Chiesa, G. Rinaudo and M. Vigone		1152
R. B. Perkins	. »	1160
mann, G. Alexander and D. Kessler	. >>	1
Possible interpretation of the 1815 MeV K p resonance as a $\overline{K}^*$ bound state (L.), W. $Kr\'olikowski$	. )	872
Possible means to obtain evidence concerning the spin of the K'-meson (A)		000
B. T. Feld and D. B. Lichtenberg		$\frac{996}{218}$
π-Y resonances and K <sup>-</sup> absorption reactions (L.), J. S. Dowker Scattering of low-energy K <sup>-</sup> -mesons by nuclei (L.), J. H. Hetherington		
and D. G. Ravenhall		856
Search for a mass-550 particle, G. Monnig	1	895
conservation, F. Cerulus	• »	958
Iolecole - Stati della materia		
Donor states and deformation around impurity atoms in semiconductors S. Shinohara	. "	18
Electromagnetic properties of superconductors, $F$ . Ambegaokar and $L$ . $P$ . $Kadanoff$		914
Fracture of liquids under stress due to ionizing particles (The) (L.)  B. Hahn	•	650

1356 · INDICI

Knight shifts in the intermetallic compound $PtSn_2$ (L.), S. S. Dharmatti, V. Udaya Shankar Rao and R. Vijayaraghavan	nag.	435
Il calcolo dell'intensità di diffrazione dei raggi X da parte di strutture de- notanti disordine monodimensionale - II: Applicazioni della teoria ad	L~8.	200
alcuni modelli strutturali con disordine monodimensionale, G. Allegra Investigation of styrene polymerization by means of nuclear magnetic	*	661
relaxation measurements (L.), G. Bonera, P. De Stefano and A. Riga-		
monti	3)	847
Low-field breakdown in n-type germanium, G. Ascarelli	>>	251
Magnetic and luminescent centres induced in the crystal of lithium		
fluoride by X-ray irradiation (On), A. Choudhury	>)-	457
Magnetic deflection of positive ions in liquid helium at 0.2 K, G. Careri.		010
F. Duprè and I. Modena	>>	318
Mössbauer effect measurements on superconducting indium, P. P. Craig.		400
R. D. Taylor and D. E. Nagle	>>	402
Nuclear resonance fluorescence in solid 60°Co sources, M. Giannini.		1107
D. Prosperi and S. Sciuti	)}	1197
Positron annihilation in insulators, A. Bisi, A. Fasana, E. Gatti and	*	266
L. Zappa	"	200
S. Franchetti	>>	374
Thermomagnetic study of metals by electron diffraction, S. Yamaguchi	))	487
Über die Berechnung der Schallgeschwindigkeit in Gasmischungen -		
II: Mitteilung (L.), V. S. Vrkljan	>>	189
NUCLEI - FISICA NUCLEARE		
Comparison of three equations for the spacing of nuclear levels, Y. P. Varshni		145
Sul decadimento per cattura elettronica del <sup>37</sup> A, C. Manduchi e G. Zannoni	))	-145 $-462$
Differential cross-section for the D(d, n) reaction, C. Milone and R. Ricamo	>>	
Effects of the nuclear charge polarization on the elastic scattering (The),	17	
Y. N. Kim		116
	>>	885
and R. R. Hillier		885
and R. R. Hillier	» »	
and R. R. Hillier  Energy spectrum of photoneutrons from cobalt, V. Emma, C. Milone,  1. Rubbino, S. Jannelli and F. Mezzanares		885 1300 135
and R. R. Hillier  Energy spectrum of photoneutrons from cobalt, V. Emma, C. Milone,  1. Rubbino, S. Jannelli and F. Mezzanares  Equations for α-disintegration energies, V. P. Varshni and R. N. Bhargava	*	885 1300
<ul> <li>and R. R. Hillier</li> <li>Energy spectrum of photoneutrons from cobalt, V. Emma, C. Milone,</li> <li>1. Rubbino, S. Jannelli and F. Mezzanares</li> <li>Equations for α-disintegration energies, V. P. Varshni and R. N. Bhargava</li> <li>Metodo per la ricerca delle configurazioni di equilibrio nel modello a</li> </ul>	» »	885 1300 135 449
<ul> <li>and R. R. Hillier</li> <li>Energy spectrum of photoneutrons from cobalt, V. Emma, C. Milone, A. Rubbino, S. Jannelli and F. Mezzanares</li> <li>Equations for α-disintegration energies, Y. P. Varshni and R. N. Bhargava Metodo per la ricerca delle configurazioni di equilibrio nel modello a goccia (Un) (L.), S. Gallone</li> </ul>	» »	1300 135 449 1093
and R. R. Hillier  Energy spectrum of photoneutrons from cobalt, V. Emma, C. Milone, A. Rubbino, S. Jannelli and F. Mezzanares  Equations for α-disintegration energies, V. P. Varshni and R. N. Bhargava  Metodo per la ricerca delle configurazioni di equilibrio nel modello a goccia (Un) (L.), S. Gallone  Protons from <sup>32</sup> S bombarded by 14.4 MeV neutrons (L.), B. Antolković .  Quasi-elastic nucleon-nucleus scattering at high energy, R. Karplus	» »	1300 135 449 1093 853
<ul> <li>and R. R. Hillier</li> <li>Energy spectrum of photoneutrons from cobalt, V. Emma, C. Milone, A. Rubbino, S. Jannelli and F. Mezzanares</li> <li>Equations for α-disintegration energies, Y. P. Varshni and R. N. Bhargava Metodo per la ricerca delle configurazioni di equilibrio nel modello a goccia (Un) (L.), S. Gallone</li> <li>Protons from <sup>32</sup>S bombarded by 14.4 MeV neutrons (L.), B. Antolković</li> <li>Quasi-elastic nucleon-nucleus scattering at high energy, R. Karplus and Y. Yamaguchi</li> </ul>	» » » »	885 1300 135 449 1093 853 588
<ul> <li>and R. R. Hillier</li> <li>Energy spectrum of photoneutrons from cobalt, V. Emma, C. Milone, A. Rubbino, S. Jannelli and F. Mezzanares</li> <li>Equations for α-disintegration energies, Y. P. Varshni and R. N. Bhargava Metodo per la ricerca delle configurazioni di equilibrio nel modello a goccia (Un) (L.), S. Gallone</li> <li>Protons from 32S bombarded by 14.4 MeV neutrons (L.), B. Antolković</li> <li>Quasi-elastic nucleon-nucleus scattering at high energy, R. Karplus and Y. Yamaguchi</li> <li>Relations between polarizations due to charge independence (L.), L. Michel</li> </ul>	» » »	1300 135 449 1093 853
<ul> <li>and R. R. Hillier</li> <li>Energy spectrum of photoneutrons from cobalt, V. Emma, C. Milone, A. Rubbino, S. Jannelli and F. Mezzanares</li> <li>Equations for α-disintegration energies, Y. P. Varshni and R. N. Bhargava Metodo per la ricerca delle configurazioni di equilibrio nel modello a goccia (Un) (L.), S. Gallone</li> <li>Protons from 32S bombarded by 14.4 MeV neutrons (L.), B. Antolković</li> <li>Quasi-elastic nucleon-nucleus scattering at high energy, R. Karplus and Y. Yamaguchi</li> <li>Relations between polarizations due to charge independence (L.), L. Michel Spins and parities of excited levels in 212Po, M. Giannini, D. Prosperi</li> </ul>	» » » »	885 1300 135 449 1093 853 588 203
<ul> <li>and R. R. Hillier</li> <li>Energy spectrum of photoneutrons from cobalt, V. Emma, C. Milone, A. Rubbino, S. Jannelli and F. Mezzanares</li> <li>Equations for α-disintegration energies, Y. P. Varshni and R. N. Bhargava Metodo per la ricerca delle configurazioni di equilibrio nel modello a goccia (Un) (L.), S. Gallone</li> <li>Protons from 32S bombarded by 14.4 MeV neutrons (L.), B. Antolković</li> <li>Quasi-elastic nucleon-nucleus scattering at high energy, R. Karplus and Y. Yamaguchi</li> <li>Relations between polarizations due to charge independence (L.), L. Michel Spins and parities of excited levels in 212Po, M. Giannini, D. Prosperi and S. Sciuti</li> </ul>	» » » »	885 1300 135 449 1093 853 588
<ul> <li>and R. R. Hillier</li> <li>Energy spectrum of photoneutrons from cobalt, V. Emma, C. Milone, A. Rubbino, S. Jannelli and F. Mezzanares</li> <li>Equations for α-disintegration energies, Y. P. Varshni and R. N. Bhargava Metodo per la ricerca delle configurazioni di equilibrio nel modello a goccia (Un) (L.), S. Gallone</li> <li>Protons from 32S bombarded by 14.4 MeV neutrons (L.), B. Antolković</li> <li>Quasi-elastic nucleon-nucleus scattering at high energy, R. Karplus and Y. Yamaguchi</li> <li>Relations between polarizations due to charge independence (L.), L. Michel Spins and parities of excited levels in 212Po, M. Giannini, D. Prosperi</li> </ul>	»  »  »  »  »	885 1300 135 449 1093 853 588 203

#### NUCLEONI

Energetic electromagnetic cascade produced in a high-energy nucleon-		
nucleon interaction (L.), P. L. Jain	pag.	1104
Experimental evidence for pion-pion interaction in high-energy $\pi$ - $\mathcal{N}$		
and N-N events (On the), P. Surányi	»	40
High-energy nucleon-nucleon collisions, W. K. R. Watson	»	183
Investigation of azimuthal effects at multiple particle production,		
S. A. Azimov, L. P. Chernova, G. M. Chernov, V. M. Chudakov and		
B. K. Nikishin	>>	235
Monte Carlo calculations on interactions of 300 MeV protons with carbon,	"	
E. Abate, G. Bellini, E. Fiorini and S. Ratti	»	1206
Proton energy spectra in the Drell model of double photoproduction	"	1200
(L.), C. Gualdi	»	1313
Reaction cross-sections with 14 MeV neutrons (On), N. B. Gove and	"	1919
R. Nakasima		158
Scattering of high-energy nucleons by heavier nuclei (L.), T. Takemiya	*	198
		1004
and Y. Sakamoto	*	1284
LASMI		
MANUAL TO THE PARTY OF THE PART		
Diffusion of an electric field in a collisionless plasma (On the), F. Engel-		
mann, M. Feix, E. Minardi and J. Oxenius	*	1012
Magneto-compressional disturbance in a tepid plasma, P. L. Auer and		
J. A. Nation	»	533
Multipole magnetic field configurations for stable plasma confinement,		
T. Ohkawa and W. D. Kerst	»	784
1. Ometical and W. D. Hose		101
AGGI COSMICI		
Cosmic ray observations at 42 m w.e. underground at Hobart, Tasmania,		
A. G. Fenton, R. M. Jacklyn and R. B. Taylor	*	285
G. M. counting rate increase recorded at balloon altitude (On a), D. Brini,		
M. Galli, G. L. Tabellini, U. Ciriegi and A. Gandolfi	*	1261
Primary cosmic radiation and extensive air showers, B. Peters	*	800
ELATIVITÀ		
Mass anisotropy and planetary motion, E. V. Ivash and R. F. Sweet	*	352
Remarks on the derivation of the Lorentz transformation, E. M. Dewan	*	943
Static gravitational fields in general relativity, A. A. Evett	>>	779
Total energy-momentum vector of a closed system in general rela-		
tivity (The) (L.), C. Pellegrini	»	427
PETTROSCOPIA		
Stark shift of the hyperfine structure of an atom with a ${}^2S_{\frac{1}{2}}$ ground		0.00
state (The), L. W. Anderson	>>	936

# INDICE DELLE RECENSIONI

Progress in Cryogenics, edited by K. Mendelssohn
E. H. Putley — The Hall Effect and Related Phenomena
H. C. Corben and P. Stehle – Classical Mechanics
J. Wilks - The Third Law of Thermodynamics
Progress in Low Temperature Physics, edited by C. J. Gorter
The Physical Examination of Metals, ed. by B. Chalmers and A. G. Quarrell >> 442 L. D. Landau and E. M. Lifshitz — Electrodynamics of Continuous Media >> 443 R. E. Scott — Linear Circuits
L. D. Landau and E. M. Lifshitz – Electrodynamics of Continuous Media » 443 R. E. Scott – Linear Circuits
Studies in Theoretical Physics. Ministero per la Ricerca scientifica e gli Affari Culturali, Nuova Delhi
Affari Culturali, Nuova Delhi
A. Alberigi Quaranta e B. Rispoli – Elettronica
The state of the s
I Turwiis - Encyclonedic Dictionary of Physics 445
5. THEWEIS - Bucgetopeate Dictionary of Lugates
D. J. Thouless - The Quantum Mechanics of Many Body Systems » 446
Handbuch der Physik - Bd. LIII: Astrophysik IV: Sternsysteme » 446
I. I. GOLD'MAN, V. D. KRIVCHENKOV, V. I. KOGAN and V. M. GALITSKII -
Problems in Quantum Mechanics, translated and edited by D. TER HAAR > 447
I. I. Gold'man and V. D. Krivchenkov - Problems in Quantum Mechanics,
edited by B. T. Geilikman, translated by E. Marquit and E. Lepa . » 447
J. C. Slater - Quantum Theory of Atomic Structure
E. Bauer - Elektronenbeugung
L. D. LANDAU and E. M. LIFSHITZ - Mechanics
J. A. RICHARDS, F. W. SEARS, M. R. WEHR and M. W. ZEMANSKY -
Modern University Physics
E. Fermi - Notes on Quantum Mechanics
S. S. Schweber - An Introduction to Relativistic Quantum Field Theory . * 1331
G. Francis - Ionization Phenomena in Gases
A. Goldsmith, T. E. Waterman and H. J. Hirschhorn - Handbook of
Thermophysical Properties of Solid Materials

Fine del Volume XXII, Serie X, 1961

